

**110.01 LEDGERS AND MATERIALS INSPECTION SUMMARY****Field Ledger**

A DH-2017, Project Control Data Form, shall be placed in the front of the ledger book and shall be maintained current.

A Field Ledger Sheet (DH-345) must be prepared for each pay item in the contract. Also, any additional entries for payment (or reduction) listed on the progress and final estimate must be supported by a ledger sheet.

Each pay item is to be entered by units as completed and a source document shown for each entry. The source document will usually be an inspector's diary or load tickets. In some cases, cross sections, the mass diagram, computer runs or other material may be the source document. In any case, the source document must be recorded on the field ledger sheet.

Automated field ledger sheets should be prepared in the same sequence as the items appear in the contract. See exhibits for typical ledger sheets. Usually, entries will be made each day work is performed if the work is of a nature that pay units are completed. Examples of items in this category are aggregate base, asphalt applied, plant mix, concrete, etc. Other items may be posted periodically (usually monthly) if the work covers several steps requiring considerable time before acceptance can be made. Examples of such items in this category are fence, guardrail, clearing and grubbing, etc. Items completed during the progress of the project should be declared final as soon as possible.

A portion of the ledger provides a record of the contract or authorized quantity and any changes thereof. A comparison of the authorized and actual quantity should be made periodically and a quantity variance request should be prepared when significant overruns or under-runs are anticipated or apparent. The percentage of the authorized verses the actual quantity will be listed by the automated program. See Section 104.02 for criteria requiring a QVR. The "checked by" column should be filled out when the posted quantities have been checked to the source document. This is a posting check only, all other checks shall be considered as specification and mathematical accuracy checks. Sample entries for various items are shown in the exhibits at the end of this section.

When separate ledger sheets are necessary, they will identify the specific project involved.

On single or multiple projects let under one contract, the cost accounting procedures are as follows:

- A. A single ledger sheet will be prepared for each contract item listed in that contract. Separate ledger sheets for the same item will be required under the following conditions.
  1. When the Construction Section, district management, or the FHWA determines a major contract change will adversely affect the relative percentages of the projects.
  2. When items are declared nonparticipating during the progress of the project.

- B. Quantities will be posted progressively.
- C. Change orders and QVRs will be entered.
- D. Ledgers will be cross-referenced and estimate vouchers prepared at least monthly. (See Manual, Section 109.05, Partial Payments, for details.)
- E. Each ledger will have a master sheet that lists the contract number on multiple projects. Also, the percent each project and section is of the total contract will be listed. These percentages will be determined from the detailed estimate. For ready reference, it is suggested to place the detailed estimate in the front of each ledger.
- F. The project which construction engineering is to be charged shall be listed on the ledger. The project number with etc. will represent all the projects in the contract. Ledgers for the other items in the categories of A-1 and A-2 above will list the actual project number.

Corrections, minus quantities or deductions should be handled as shown on the ledger exhibits.

When project ledgers must be corrected due to errors, an appropriate notation should be made in remarks to avoid any confusion resulting from the new entry.

### **Utility Ledger**

A Utility Field Ledger Sheet (DH-345A) must be prepared for all utility and railroad agreements. (See Exhibit 110.01-4 for an example of an actual cost agreement ledger sheet.) Ledgers for fixed-cost agreements and railroad agreements that included communication lines would be similar. Ledgers for railroad relocations and grade crossings would be prepared with similar information. Except in place of poles, reference would be made to pertinent diaries. (See exhibit at end of this section.)

### **Materials Inspection Summary**

The Materials Inspection Summary (DH-853) will now be separate from the Construction Field Ledger (DH-345). (See the Materials Manual, Section 16-808, Quality Control Inspection Program.) The Materials Inspection Summary (DH-853) may be kept in the same binder with the Construction Field Ledger (DH-345) or may be kept in a separate binder at the Resident's option.

# LEDGER

DH-345

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 THIS ITEM IS: 132.44% OF AUTH AMOUNT OR \$ 1622.22 OVER PROJECTED AMOUNT  
 IR-15-1(79)40 PAY UNIT=SF FEDERAL AID AUTHORIZATION QUANTITY AUTH\_QUANTITY AUTH\_AMOUNT  
 ITEM #= 626-A-1 UNIT PRICE=\$\*\*\*\*\*2.00 CONTRACT 2500.00 2500.00 5000.00  
 ITEM: RENT CONSTRUCTION SIGN CLASS A

| DATE<br>POSTED | DATE<br>REPORTED | POST<br>BY | CHK<br>BY | DRI<br>BY | BASIS OF<br>PAYMENT | DAILY<br>TOTAL | TOTAL TO<br>DATE | PAID<br>EST# | REMARKS                 |
|----------------|------------------|------------|-----------|-----------|---------------------|----------------|------------------|--------------|-------------------------|
| 05-02-86       | 04-10-86         | rh         | WF        |           | D GDB-1             | 146.00         | 146.00           | 14           | COMP.ON DIARY           |
| 05-02-86       | 04-18-86         | rh         | WF        |           | D GDB-3             | 206.00         | 352.00           | 14           | COMP.ON DIARY           |
| 05-02-86       | 04-22-86         | rh         | WF        |           | D BT-10             | 983.00         | 1335.00          | 14           | COMP.ON DIARY           |
| 06-02-86       | 05-22-86         | rh         | WF        |           | D BT-38             | 117.00         | 1452.00          | 14           | COMP.ON DIARY           |
| 06-19-86       | 06-16-86         | rh         | WF        |           | D GK-55A            | 320.00         | 1772.00          | 14           | COMP.ON DIARY           |
| 25-86          | 06-19-86         | rh         | WF        |           | D BT-58             | 384.00         | 2156.00          | 14           | COMP.ON DIARY           |
| 06-25-86       | 06-20-86         | rh         | WF        |           | D BT-59             | 101.25         | 2257.25          | 14           | COMP.ON DIARY           |
| 07-03-86       | 07-03-86         | rh         | WF        |           | C SHEET             | 661.10         | 2918.35          | 14           | SUMMARY OF COMP.SHEETS  |
| 07-03-86       | 06-24-86         | rh         | WF        |           | D BT-62             | 133.00         | 133.00           | 14           | COMP.ON DIARY           |
| 07-07-86       | 07-07-86         | rh         |           | M         |                     | 2918.35        | 3051.35          | 14           | COMPUTER ERROR ADDIDION |
| 07-17-86       | 07-03-86         | rh         | WF        |           | C SHEET             | 143.00         | 3194.35          | 14           |                         |
| 07-17-86       | 07-10-86         | rh         | WF        |           | C SHEET             | 8.00           | 3202.35          | 14           |                         |
| 07-22-86       | 07-16-86         | rh         | WF        |           | C SHEET             | 44.76          | 3247.11          | 14           | SHEET 2 OF 2            |
| 02-11-88       | 08-04-87         | rh         |           | D         | BT-232              | 64.00          | 3311.11          | 21           | COMP.ON DIARY           |

# LEDGER

DH-345

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 THIS ITEM IS: 231.20% OF AUTH AMOUNT OR \$ 7172.84 OVER PROJECTED AMOUNT  
 IR-15-1(79)40 PAY UNIT=LB FEDERAL AID AUTHORIZATION QUANTITY AUTH\_QUANTITY AUTH\_AMOUNT  
 ITEM #: 616-D UNIT PRICE=\$\*\*\*\*\*1.70 CONTRACT 3216.00 3216.00 5467.20  
 ITEM: BREAKAWAY STEEL SIGN POSTTYPE B

| DATE<br>POSTED | DATE<br>REPORTED | POST<br>BY | CHK<br>BY | DRI<br>BY | BASIS OF<br>PAYMENT | DAILY<br>TOTAL | TOTAL TO<br>DATE | PAID<br>EST# | REMARKS            |
|----------------|------------------|------------|-----------|-----------|---------------------|----------------|------------------|--------------|--------------------|
| 09-18-86       | 09-15-86         | rh         | WF        |           | D GB-34             | 450.00         | 450.00           | 14           | EST.QUAN.          |
| 10-07-86       | 10-03-86         | rh         |           |           | D GB-49             | 990.00         | 1440.00          | 14           | EST.QUAN.          |
| 12-01-86       | 11-25-86         | rh         |           |           | D GB-91             | 4560.00        | 6000.00          | 14           | EST.QUAN.          |
| 12-01-86       | 11-26-86         | rh         | GDB       |           | C SHEET             | 6994.88        | 12994.88         | 14           | WORK SHEET SUMMARY |
| 02-02-88       | 02-02-88         | rh         | GDB       |           | M ZERO EST.         | -6000.00       | 6994.88          | 21           | ZERO OUT EST.QUAN. |
| 02-11-88       | 10-20-87         | rh         | WF        |           | C S. ADD            | 440.44         | 7435.32          | 21           |                    |



DH-345A 10-77  
 PROJECT NO. I-16-80N-2(39)/27  
 UTILITY FIELD LEDGER  
 UTILITY Union Pacific Railroad

AUTH. TO PROCEED (DATE) 7-12-82  
 (SEE CONST. MANUAL 105.07)  
 WORK COMMENCED (DATE) 9-5-82  
 (GRADE X-ING SIGNALS ONLY) DH-2263 ☐ DH-2264 ☐ Final Acceptance Letter ☐  
 WORK COMPLETED (DATE) 5-16-84  
 BOARD ORDER COMPLETION DATE: N/A  
 \* ENCROACHMENT PERMIT (DATE) \_\_\_\_\_  
 AUTHORIZED EXTENSIONS: \_\_\_\_\_  
 AGREEMENT NO. LD-21923 DATE 4-18-82  
 ACTUAL COST (EST.) \$ 397,345.00  
 FIXED COST AMOUNT \$ \_\_\_\_\_  
 ( \*N/A TO RAILROAD AGREEMENTS )

| BILL NO. | AMOUNT     | DATE     | AMOUNT PAID | RETAINAGE |
|----------|------------|----------|-------------|-----------|
| 377923   | 16,597.39  | 11-27-81 | 15,767.52   | 829.87    |
| 203552   | 192,109.88 | 6-15-83  | 182,504.39  | 9,605.49  |
| 392161   | 9,670.75   | 10-4-83  | 9,187.21    | 483.54    |
| 209640   | 12,439.23  | 11-5-83  | 11,817.27   | 621.96    |
| 395005   | 27,778.25  | 12-11-83 | 26,382.34   | 1,388.91  |
| 212562   | 13,513.75  | 1-3-84   | 12,838.06   | 675.69    |
| Totals   |            |          | 258,503.79  | 13,005.46 |

DESCRIPTION OF WORK TO BE DONE: Construct and remove 5420 feet of temporary shoofly, adjust 2774 feet of main track, and adjust communication facilities.

| DATE    | POSTED BY | CHECKED BY | Diary Page No. | REMARKS                           |
|---------|-----------|------------|----------------|-----------------------------------|
| 9-6-82  | CB        | JT         | CTH-9          | 1- Foreman & 8 Men                |
| 9-7     | CB        | JT         | SE-34          | Digging Post Holes                |
| 9-8     | CB        | JT         | BG-3           | 1- Inspector on Project           |
| 9-11    | CB        | JT         | BG-4           | 9- Men moving communication Poles |
| 9-12    | CB        | JT         | BG-5           | 10- Men Installing Poles          |
|         |           |            |                |                                   |
| 8-10-85 | CB        | JT         | JH-198         | Laying Panels                     |
| 8-21    | CB        | JT         | JH-41          | Laying Panels & Replacing ties    |
|         |           |            |                |                                   |
| 12-4-85 | CB        | JT         | JH-212         | Gauging rail & driving spikes     |
| 12-5    | CB        | JT         | JH-216         | Removing switch & gauging rail    |

**110.02 DIARIES****General**

The purpose of a diary is to provide the State with a complete and accurate record of the contractor's operation and support the fact that the project was constructed in conformance with the Plans, Specifications, and Special Provisions. The diary provides facts and figures to justify pay quantities and information to analyze a contractor's claim for extra work or changed conditions. Force account type records should be maintained whenever there is a possibility of a contractor's claim. (See Manual Section 109.03.)

The **ITD-25 STANDARD CONSTRUCTION DIARY** must always correspond with the **ITD-657 EMPLOYEE TIME SHEET AND ACTIVITY REPORT**. District Records Inspectors should perform periodic review of this documentation to assure correlation between the diary and the time sheet.

**Preparing and Submitting Diaries**

When multiple projects are let under one contract, the following procedure must be followed:

Quantities should be reported to the appropriate project funding code according to actual placement on the project. Both stations and funding codes should be reported with pay quantities to assist office personnel and records inspector cross checking reported quantities. Bid items shown in summaries, proposals, and estimates are to be used only as a guide in identifying locations and estimated quantities of the items. Proration is permissible for items such as mobilization, lump sum items, trainees, and traffic control based on detailed estimates. Questions regarding charges to projects should be directed to the Projects Unit of the Financial Control Section.

Project personnel responsible for controlling and reporting quantities will prepare and submit the ITD-25, Standard Construction Diary, on a daily basis. Separate diaries should be kept for each contract so they can be filed with the project records. A good practice is to record information while it is still fresh in your mind. Survey personnel will also prepare daily diaries unless the Resident deems it unnecessary. Personnel responsible for recording more than one contractor's men and equipment should list them separately. At times, this may require more than one diary sheet.

The Resident Engineer should document his involvement with the supervision of project activities. Significant project visits, reviews, meetings, etc. that are not otherwise documented by correspondence or reports should be made a part of the project diary record. The Resident Diary, ITD-25A, is recommended for this purpose. If other forms are used, they must be made a part of the project records. District Staff Engineers and others involved with the project on an occasional basis may need to submit diaries if their involvement in the project is important enough to document.

The Resident or his designee in charge of the project should review and initial all project diaries. It is the Resident's option to file project diaries by date, operation, or the reporting individual. Current diaries should be placed in the 7" x 12" arch clipboard. When the board is filled or as considered necessary, they should be bundled with prong fasteners and a cover sheet listing the project and time period. Carbon copies of the diaries should be bundled and filed with the project records. Diaries should be prepared in ink. Avoid the use of light blue colors. Personnel should be encouraged to print rather than use longhand. Diaries become a source document when used to report quantities.

Items to be included or procedures to use in preparing the construction diary are shown on the front cover of Form ITD-25.

**110.03 PROJECT RECORDS INSPECTION PROGRAM****General**

A suitable check for accuracy, documentation, computations, etc. is an important part in any engineering effort.

All quantities shall be verified by a checking process directed by the Resident within his organization. To the extent possible, computing and checking should progress concurrently with the project. The project records should indicate the initials of the computer and checker performing these respective functions along with the dates when they were completed.

Routine records checking will help detect errors and omissions early, keep the checking current, and expedite complete payment as each phase or item is finalized. Final checked quantities should be indicated by the Resident. This check of quantities must eventually assure that the items were correct from source to final estimate. It shall verify computations, documentation of activity, compliance with specifications, policies and procedures, and mathematical accuracy.

The District Engineer shall also verify the accuracy of final estimate quantities through a system of concurrent independent checking of project records. The District Records Inspector will be assigned this responsibility.

More details covering the records inspection review program may be found in the District Record Inspector's desk manual.

The records inspection program will be periodically evaluated and audit work papers reviewed on a sampling basis by Construction Section personnel. Final review reports (DH-1406) will be issued accepting the project records. Upon completion of this review, work papers should be filed with the project records. Work papers may be maintained at another location as approved by the District Engineer.

**Record Inspection System**

Independent records inspection system will provide the following:

- A. Assist the project personnel in setting up the necessary records, files, and ledgers on all projects.
- B. Routine checking of project records as the work progresses.
- C. A complete check from source document to final estimate of all items checked.
- D. At the district's option, a written report of findings may be submitted after each inspection.



- E. At the District's option, a status report will be submitted to the District Engineer each month on the review work performed by the District Records Inspector. (See Exhibit 110.03-1.)
- F. The final report (DH-1996) should be submitted with final estimate. (See Exhibit 110.03-2.) If this is not possible, then a letter of explanation would be required. In any event, the final estimate must be reconciled with the project ledger by the District Records Inspector prior to submittal to the contractor.

The Records Inspector should make arrangements with the Resident to independently audit records as items are completed. Quantities must be computed and checked by project personnel prior to this audit. All records and computations, which the Records Inspector has verified for accuracy and compliance, are to be indicated by audit symbols and/or initials and date on the source document, filed ledger, and/or on his audit work paper.

Any additional help required to keep the records inspection current should be provided from personnel that are not assigned to the Resident in charge of the project.

Written reports will keep the district informed of the status of records, payment, and checking and provide a record for the project files. The report should point out any discrepancies and corrective action taken. The Records Inspector should not make changes in the records. Any discrepancies should be rechecked by the project personnel and corrections (if any) made by them with proper documentation of the action taken. The necessity of rechecking may be determined by the District Engineer if the dollar value is insignificant.

### **Disposition of Adverse Findings**

Procedural deviations (not minor mathematical errors) will be reported to the District Engineer as soon as they are discovered. Differences which have not been resolved at the time of the final estimate will be presented on the DH-1996, Final Inspection and Review of Final Estimate and Records, for written disposition by the District Engineer.

If the disposition letter is prepared by the Resident, it should either be signed by the District Engineer or accompanied by a letter indicating concurrence by the District Engineer.

The letter should contain at least the following information:

- A. Brief History.
- B. Give justification for accepting the exception.
- C. Assurance that material was received.
- D. Corrective action taken. (What is being done to prevent happening on current and future projects.)

On federal-aid projects, recommendations for federal participation or nonparticipation must be included in the letter. On state projects, acceptance for final payment should be recommended.

**Claim Settlements Subsequent to the Submittal of the Final Estimates**

The final estimate will be submitted to the contractor for his approval and signature as soon as the necessary measurements and computations can be made. The contractor's approval of the final estimate will not prejudice any pending claims under the contract the contractor may have against the State. (Reference Subsection 109.08.)

In order for the contractor to receive the final estimate as soon as possible and so that all project records are being handled uniformly in regard to claim settlement requiring payment by change order, the following guidelines should be followed:

- A. At the time the District Records Inspector completes his final audit of all project records, a check should be made with the Resident to determine if there are any claims pending or anticipated. If there is, a remark should be placed on the DH-1996, Final Inspection and Review of Final Estimate and Records, in order to alert Management and Financial Control.
- B. If necessary, a change order shall be prepared for payment immediately following the settlement of the claim. After a subsequent independent review by the District Records Inspector, the district should revise the DH-1996 to reflect the adjusted final project cost, give a brief explanation of the situation, and show the change order number. A field ledger sheet will be required to support these types of payments. However, a revision of the final estimate is not necessary.

ITD-2081 7/88  
Distribution:

(OPTIONAL)

Sheet 1 of 2

## STATUS REPORT

Project Records Inspection &amp; Final Estimate

Report for the Month of October 1977Dist. No. 2

\* District Engr.  
Resident Engr.  
Dist. Office Mgr.  
Records Inspector  
Asst. Dist. Engr.

Records Inspector John Doe

| Project  | Location                  | Balance    | Contract Amount | Work Completed (Date) | Project-Percent Complete | Books-Percent Complete | Date Completed | Percent Complete | Date Completed | Final Estimate | Submitted to Contractor | Submitted to Inspector | Submitted to Headquarters | Amount Due | Unliquidated Amount | Materials Summary Submitted | Moisture Related (Date) |
|--|---------------------------|------------|-----------------|-----------------------|--------------------------|------------------------|----------------|------------------|----------------|----------------|-------------------------|------------------------|---------------------------|------------|---------------------|-----------------------------|-------------------------|
| S-2864(7)  | Paul Streets              | Report     | \$ 810,354.30   | 8-6-76                | 100                      | 100                    | 8-6-77         | 82               | 10-1-77        |                |                         |                        |                           |            |                     |                             |                         |
| ST-2391(630)   | Nevada Line North         | Twin Falls | \$ 619,416.00   | 6-10-76               | 100                      | 95                     | 9-28-77        | 40               | 10-1-77        |                |                         |                        |                           |            |                     |                             |                         |
| S-3701(2)  | Flat Creek to Three Creek | Twin Falls | \$ 256,657.50   | 10-8-76               | 60                       | 22                     |                | 20               |                |                |                         |                        |                           |            |                     |                             |                         |
| 1-804-2(27)32  | Elmore to Gooding Line    | Shoshone   | \$ 2,001,592.00 | 6-7-76                | 45                       | 40                     |                | 80               |                |                |                         |                        |                           |            |                     |                             |                         |
| 1-804-4(5)232  | Sublet to Juniper         | Report     | \$ 1,440,708.86 | 3-25-76               | 60                       | 35                     |                | 25               |                |                |                         |                        |                           |            |                     |                             |                         |
| 25-2803(17)  | Shoshone                  | Shoshone   | \$ 853,245.00   | 5-27-76               | 100                      | 100                    |                | 100              |                |                |                         |                        |                           |            |                     |                             |                         |
| <p>Remarks:</p> <p>See attached Sheet</p> <p>Project personnel have been busy and have not had a chance to compute and check quantities.</p> <p>Item 303A 3/4" Aggr. for Base 1460 Ton. No moisture tests were taken to document moisture control in excess of 4%. Discussed this matter with the Resident Engineer.</p> <p>Findings reported last month have been resolved.</p> <p>Item 301, 20 weigh tickets in books #1011612 were not initiated by the checker. Discussed this with the Resident Engr. He will have the Inspector write a memo to the file, explaining the problem.</p> <p>Stockpile Matl. for Item 405A. 43,000 Ton @ \$ 24 reported on Estimate as 5 Lader only supports 24,245 ton. No reference is made supporting the source document or cost of production. Discussed this matter with the Resident Engr. Will follow up next month.</p> <p>Records are generally good. Errors found during the final audit were resolved by project personnel in my presence.</p> |                           |            |                 |                       |                          |                        |                |                  |                |                |                         |                        |                           |            |                     |                             |                         |

DISTRICT 4 STATUS REPORT ATTACHMENT, OCT. 1977*General Comments and Recommendations:*

*As I mentioned in last months report, that some exceptions were found in reconciling progress estimates with ledgers. This month check revealed that corrective action has been taken.*

*The last reviews of project records reveal a noticeable improvement in record keeping. It appears that project personnel are following the Construction Manual procedures closer.*

*Records are generally good. I would like to recommend that Resident Engineers advise their project Inspectors to pay closer attention to method of measurement. Particularly to material measured in trucks by the cubic yard or ton.*

ITD-1996 7-88 FINAL INSPECTION AND REVIEW OF FINAL ESTIMATE AND RECORDS

PROJECT \_\_\_\_\_ WORK \_\_\_\_\_ AUTH. NO. \_\_\_\_\_ CONTRACT NO. \_\_\_\_\_  
DATE AWARDED \_\_\_\_\_ 19 \_\_\_\_\_ CONTRACT TIME \_\_\_\_\_ CONTRACT BID AMOUNT \$ \_\_\_\_\_  
HIGHWAY \_\_\_\_\_ COUNTY \_\_\_\_\_ BEGINNING MILEPOST \_\_\_\_\_ TO ENDING MILEPOST \_\_\_\_\_  
FROM \_\_\_\_\_ TO \_\_\_\_\_  
Local Destination Local Destination  
TYPE \_\_\_\_\_  
LOCAL COOPERATORS \_\_\_\_\_  
CONTRACTOR \_\_\_\_\_  
SUBCONTRACTORS \_\_\_\_\_  
BONDING COMPANY \_\_\_\_\_  
RESIDENT ENGINEER \_\_\_\_\_ WORK COMMENCED \_\_\_\_\_ COMPLETED \_\_\_\_\_  
TIME EXTENSIONS \_\_\_\_\_ AUTHORIZED SUSPENSIONS \_\_\_\_\_  
FINAL INSPECTION. STATE \_\_\_\_\_ BY \_\_\_\_\_  
FINAL INSPECTION. FEDERAL \_\_\_\_\_ BY \_\_\_\_\_  
FINAL INSPECTION. LOCAL \_\_\_\_\_ BY \_\_\_\_\_

SCOPE: This review covered the project records to determine that the established state procedure and Federal Highway Administration requirements were complied with. The following tests of the field records were performed.

- A. The final estimate has been reconciled with the project ledger (prior to contractor signing).
- B. Mathematical accuracy of computations was sampled on a random basis and documented.
- C. Determined that measurement of pay quantities was in accordance with the contract provisions and standard specifications.
- D. Change Orders were reviewed. Work was performed and costs coded in accordance with the Change Order provisions and approved.
- E. Force account work was authorized by Change Orders. Work was performed as authorized and properly documented.
- F. Source records were prepared in accordance with established state procedures. Project identity, pay item, location, quantity, evidence of receipt and/or performance of the work was properly documented.
- G. Project credits, material penalties, purchase of material on hand were properly computed and applied. Where applicable, sampling and testing fees were assessed.
- H. Liquidated damages determination based on contract time period verified and computations checked.
- I. Reviewed progress and final inspection reports and acceptance letter of the state and Federal Highway Administration for engineering acceptance of construction work.
- J. Determined that prime contractor performed their required percentage of the total contract price, exclusive of speciality items in accordance with the specifications or Special Provisions.
- K. Determined that subcontractors were approved prior to working on the project.

CONCLUSIONS: The policies, procedures, practices, and internal control employed on the project are in accordance with established state procedures and Federal Highway Administration requirements except as noted below. The distribution of final project construction costs are as follows:

|   | Participating | Nonparticipating | Total    |
|---|---------------|------------------|----------|
| Total of all Contract Items . . . . .                               | \$ _____      | \$ _____         | \$ _____ |
| Materials Penalties . . . . .                                       |               | (-)              | \$ _____ |
| TOTAL PROJECT COST . . . . .  |               |                  | \$ _____ |
| Change of Source Sampling and Testing Fees . . . . .                |               | (-)              | \$ _____ |
| State Furnished Materials (8 Cost to Contractor) . . . . .          |               | (-)              | \$ _____ |
| Liquidated Damages _____ Days @ \$ _____ Percent Time Elapsed _____ |               | (-)              | \$ _____ |
| Materials Left on Hand Change Order Number _____                    |               | (-)              | \$ _____ |
| TOTAL TO PAY CONTRACTOR   |               |                  | \$ _____ |

COMMENTS \_\_\_\_\_

DATE \_\_\_\_\_ DISTRICT RECORDS INSPECTOR (Signature) \_\_\_\_\_

DISTRICT \_\_\_\_\_ PROJECT RECORDS INSPECTION REPORT NO. \_\_\_\_\_

The above described project has been completed in accordance with plans and specifications and is hereby recommended for acceptance and final payment.

Date: \_\_\_\_\_ Signed: \_\_\_\_\_ District Engineer  
cc: Attached & Distributed with Final Estimate

## Final Estimate Review Report - Project I-IG-80N-2(50)120

## Exceptions:

## 1. Minor Errors

Show number of minor errors by type such as posting errors, mathematical errors, etc.

## 2. Material tickets not properly validated.

Item 302A2 150 weigh tickets lacked checkers initials.  
2250 Ton @ \$1.00 = \$2,250.00

Item 407D 20 weigh tickets lacked checkers initials.

300 Ton @ \$7.00 = \$2100.00.

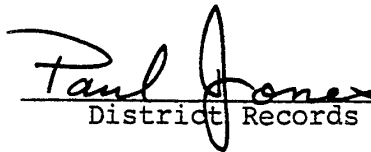
Construction diaries indicated the work was in progress.

Tickets were in proper sequence and the unsigned tickets were scattered throughout 10 books examined for item 302A2 and one book for item 407D.

Unauthorized method of measurement

Item 205A. Cross section notes were not available to support 1,041 C.Y. of Uncl. Excavation from Soft Spots.  
1,041 C.Y. @ \$.75 = \$780.75.

Resident Engineer stated the notes were lost during construction of the project. The quantity used for payment was based on load count. The hauling units were measured and the established shrink factor for this material was applied to determine quantity for payment.

  
District Records Inspector

**110.04 RECORDKEEPING ON SPECIAL PROJECTS****General**

These procedures are to be followed on projects completed by local forces under actual cost agreements, safety program projects, and projects completed by state forces involving federal funds. These procedures are not to be used when the project involves only utility or railroad work, such as railroad grade crossing projects, when the work is accomplished by the utility or railroad company. (Reference Construction Manual 105.07.)

On projects established under a competitive bid basis and which involves a contract, the administration procedure will follow the guidelines set forth in the Certification Acceptance program.

**Project Administration**

The District Engineer will assign a Resident to each project. This assignment should be given to an individual whose construction knowledge is commensurate with the type and complexity of the project. This may be a Resident Engineer, Traffic Engineer, or Maintenance Engineer depending on the type of project involved. The Construction and Materials Sections should be informed of assignments made. (This could be done by the Resident's signature on the initial ITD-2242 submitted.)

A meeting should be held between the Resident and the local agency prior to beginning work to clarify what is required of them. It should be pointed out that the work performed and documents supporting this work must be in accordance with OMB Circular A-102 and FMC A-87. (Copies of which should be given to the local agency if they are not familiar with the contents. See DRI manual for these documents.) Minutes of this preconstruction meeting should be maintained for the project files, and a copy submitted to the Materials Supervisor.

**Inspection**

The inspection required on these projects will depend on the complexity and nature of the work and will be at the discretion of the Resident. A final acceptance letter from the District Engineer will be required on all projects, except those done by state forces, to verify completion and compliance with plans and specifications.

**Materials Inspection and Acceptance**

Small quantities of miscellaneous materials may be accepted by the Resident's visual inspection documented on Form ITD-854 for submittal with Form ITD-852, Final Materials Inspection Summary. Form ITD-853, Materials Inspection Summary, should be submitted as needed.

Materials taken from the stock of a local unit of government can be accepted by a certification provided by a responsible representative of that unit of government. For larger quantities of material (or material supplied by the State), the local governmental agency (or state) should obtain a certification from the supplier. This will then be submitted with the ITD-854.

Form ITD-852, Final Materials Inspection Summary, must accompany Form ITD-854, Inspection of Contract Items, and be submitted to the Materials Supervisor for approval.

**Changes**

Any changes in plans, specifications or agreements should be handled by change order. The local agency will be shown as the contractor.

**Forms and Reports**

The following forms and reports are required on all special projects:

- A. ITD-2242 required on all projects.
- B. Materials certification on all projects (Forms ITD-852 and ITD-854).
- C. Final acceptance letter from District Engineer is required on all projects except those done by state forces.
- D. Final Inspection and Review of Final Estimate and Records (ITD-1996) will be required on all projects. The audit conducted by the District Record Inspector shall be in accordance with requirements outlined in OMB Circular A-102 (Attachment P).
- E. Forms ITD-1262 and DA-8 should be prepared when required. The DA-8 should be signed by a responsible representative of the local jurisdiction performing the work.

Form FHWA-47, Statement of Materials and Labor, will not be required on these projects.



**110.09 CONSTRUCTION PHOTOGRAPHS****General**

There is a well-worn Chinese proverb that says that one picture is worth a thousand words. How well this applies on construction projects. A good set of photographs is an invaluable supplement to project records.

**Suggested Procedures**

The following are suggestions and tips, which will improve the quality of your photo coverage of projects:

- A. Take pictures of situations which need to be a part of the project records and which are difficult to adequately describe.
- B. Take pictures of any situation that you suspect might develop into a claim.
- C. Use at least a 1/100-shutter speed if you handhold the camera. If you must use a slower shutter speed, rest the camera on a solid support.
- D. Use the manufacturer's recommendations for setting the f stop and shutter speed for various light conditions. Tape the setting instructions in the camera case for ready reference.
- E. Fill up the viewing screen with the object you are trying to show.
- F. Use the rubber stamp which has been provided on the back of the prints and fill out the information while it is fresh in your mind. If you cannot identify the picture later, it will not be of much use. To be admissible as court evidence, photographs must be documented properly.
- G. File the negative with the print made from that negative.
- H. If possible, take pictures of the project before construction begins.
- I. When accidents occur on the project, get pictures of the traffic control devices which existed at the time of the accident.
- J. When pictures are needed and not within your capability to take, call on the Construction Section for help.